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ACTIVITIES FOR NATURAL DISASTER REDUCTION

International Decade for Natural Disaster Reduction

Report of the Secretary-General of the Conference

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INTRODUCTION

1. Natural disasters, so common in many parts of the world, strike regardless of national boundaries. Although the primary response - and responsibility - rests with national or local authorities, international action is called for when national capacities are exhausted and overwhelmed by events.

2. The international community has over the years developed mechanisms to respond to natural disasters. At the outset, natural disasters were perceived as being sudden and violent acts of nature disrupting human lives, causing death and destruction, loss of property and wealth - individually and collectively. Emphasis was placed on assisting governments with certain aspects of disasters, such as relief coordination and reconstruction, preventing epidemics caused by natural disasters from spreading, and attempting to assure that schools, housing and other types of construction are built to hazard-resistant standards. The approach was focused either on the emergency relief or on the scientific, technical and engineering aspects of disaster prevention.

3. In 1970, one of the worst natural disasters in history struck the Bay of Bengal: a violent tropical cyclone rushed up the bay, pushing before it a massive tidal wave that swept into Bangladesh, killing between a quarter and half a million people. The General Assembly requested the Secretary-General to set up a permanent disaster management mechanism. The Office of the United Nations Disaster Relief Coordinator (UNDRO), now the Department of Humanitarian Affairs (DHA), was established by the General Assembly in resolution 2816 (XXVI) of 17 December 1971. The resolution for the first time called for an integrated approach to disaster management in which disaster relief and prevention - or "reduction" as it is also referred to in the present context - formally became complementary parts of a United Nations programme.

4. Since 1971, it has become evident that natural disasters not only cause loss of life and property, but that they actually impede development. Repeated disasters only serve to compound the problem. To sudden natural disasters was added the spectre of slow-onset disasters, particularly drought followed by famine, and the displacement of enfeebled populations towards emergency feeding centres.

5. Disaster relief alone cannot overcome the overall problem posed by natural disasters. The importance of disaster management, information collection, dissemination and communication, the coordination of international action, including prevention, mitigation and preparedness, have gained in importance apace with advances in knowledge, awareness and technology. Effective disaster reduction is becoming a realistic goal. Reducing the frequency and magnitude of disasters must become part of the development process. A study based on existing sources of disaster information, and conducted by the secretariat for the International Decade for Natural Disaster Reduction, describes the rising disaster damage/loss trends over the past 30 years, and is annexed to the present report (A/CONF.172/4/Add 2).

I. INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION

A. Proclamation of the International Decade for Natural Disaster Reduction by the General Assembly

6. By the end of the 1980s, at the initiative of prominent scientists, the General Assembly concluded that a more concerted international effort was required to slow down and eventually prevent natural disasters. The three main factors which led to the launching of the International Decade for Natural Disaster Reduction (IDNDR) were: rapidly increasing disaster losses rising apace with population growth and urbanization; the fact that such losses compromised sustainable economic and social development, and added to environmental degradation; and the fact that proven methods for greatly reducing such losses were not being applied widely enough, especially in the developing countries.

7. Following the first General Assembly resolution concerning the designation of the 1990s as the International Decade for Natural Disaster Reduction (resolution 42/169), the Secretary-General in 1988 established an ad hoc group of scientists which formulated the programme framework for the decade, and also adopted the Tokyo Declaration. This led to the establishment of IDNDR to promote a significant improvement in the prevention and mitigation of disasters by the end of the twentieth century.

8. The Secretary-General also established an Inter-Agency Steering Committee composed of relevant organizations of the United Nations system to coordinate action in the Decade. The Inter-Agency Working Group (IAWG) of the Steering Committee has played an important role. Representatives of non-governmental and scientific organizations have joined the United Nations agencies in the IAWG.

9. Thus, in 1989 the General Assembly proclaimed the International Decade for Natural Disaster Reduction at its forty fourth session (resolution 44/236 of 22 December, 1989). An International Framework of Action for the Decade, approved in annex to the resolution, established the objective and goals, policy measures to be adopted by member States; action to be taken by the United Nations system; organizational arrangements during the Decade; financial arrangements; and the review process.

B. International Framework of Action

1. Objective and goals of the Decade

10. The objective of the Decade is to reduce through concerted action, especially in developing countries, the loss of life and property and socio-economic disruption caused by natural disasters.

11. The goals of the Decade are:

(a) To improve the capacity of countries to mitigate the effects of natural disasters;

(b) To devise appropriate guidelines for applying existing scientific and technical knowledge;

(c) To foster scientific and engineering endeavours aimed at closing gaps in knowledge;

(d) To disseminate existing and new technical information;

(e) To develop measures for the assessment, prediction, prevention and mitigation of natural disasters through programmes of technical assistance and technology transfer, demonstration projects and public information and training.

2. Policy and strategy

12. To reach the objective and goals of the Decade, the governments concerned have been requested:

(a) To formulate national disaster mitigation programmes and to integrate these in national development plans;

(b) To participate during the decade in concerted international action and establish national committees in cooperation with the relevant scientific and technological communities;

(c) To encourage local authorities to take appropriate steps to mobilize public and private support;

(d) To increase public awareness of risk and its consequences;

(e) To pay due attention to the health aspects of natural disasters;

(f) To improve early access to emergency supplies;

(g) To keep the Secretary-General of the United Nations informed of all developments, nationally and internationally.

13. From the outset, institutions - financial, scientific and technological, non-governmental, national and international - were encouraged to support and participate in the activities of the Decade. The organs, organizations and bodies of the United Nations were urged to accord priority to natural disaster reduction in all its aspects and phases. The formulation and implementation of public information programmes aimed at raising public awareness of the benefit of disaster reduction were emphasized. Resident Coordinators and the field representatives of the United Nations system were requested to work closely with governments to achieve the objective and goals of the Decade. Similarly, the regional commissions were requested to play their role, considering that natural disasters often transcend national boundaries.

3. Organization of the Decade

14. Concerning organizational arrangements for the Decade, the Secretary-General established a Special High-Level Council (SHLC), consisting of a limited number of internationally prominent persons to provide him with general advice on the Decade, take appropriate action to promote public awareness, and mobilize support.

15. The Secretary-General also established the Scientific and Technical Committee (STC) of about 25 experts, selected in consultation with their governments. The role of STC is to develop overall programmes to be taken into consideration in bilateral and multilateral cooperation, to evaluate the activities of the Decade, and to make recommendations in an annual report to the Secretary-General.

16. The Secretary-General established a small Decade secretariat at the United Nations Office in Geneva, to be financed from extra-budgetary sources. It is responsible for the day-to-day coordination of the Decade's activities, and provides substantive support to the SHLC, STC and other bodies.

17. The secretariat's work programme, has been organized around a number of themes that are central to the International Framework of Action:

(a) Regional activities; national IDNDR committees;

(b) Public information; information dissemination, technology and systems;

(c) Economic aspects of disasters; the private sector;

(d) International demonstration projects and other IDNDR projects.

18. The Decade secretariat has become an integral part of the Department of Humanitarian Affairs (DHA), successor to the former Office of the United Nations Disaster Relief Coordinator (UNDRO). The Decade secretariat and the Disaster Mitigation Branch of DHA have merged to strengthen disaster reduction and mitigation programme development. The secretariat continues to exercise its function within the International Framework of Action.

19. The General Assembly, in resolution 44/236, recommended that extra-budgetary resources be provided for the implementation of the Decade's activities and that, therefore, voluntary contributions from governments, international organizations and the private sector be strongly encouraged. To this end a Trust Fund for IDNDR was established by the Secretary-General. Thanks to committed donors and active support in kind from the specialized agencies, the Decade secretariat and its activities have moved forward, though often precariously.

20. Lastly, concerning the organization of the Decade, it was decided that the Economic and Social Council, during its second regular session of 1994, would carry out a mid-term review of the implementation of the International Framework of Action of the Decade. This review follows the World Conference on Natural Disaster Reduction.

4. Targets for the Decade

21. As recommended by STC, the General Assembly in resolution 46/149 endorsed the targets for the Decade:

22. By the year 2000, all countries, as part of their plans to achieve sustainable development, should have:

(a) Comprehensive national assessments of risks from natural hazards, with these assessments having been taken into account in development plans;

(b) Mitigation plans at national and/or local levels that include long-term prevention, preparedness and community awareness;

(c) Ready access to global, regional, national and local warning systems, and the ability to ensure a broad dissemination of disaster warnings.

23. In the same resolution, the General Assembly, for the first time, endorsed the convening of a world conference of representatives of national committees for IDNDR, bringing together a wide range of participants, and contributing to the mid-term review of the Decade.

II. PROGRAMME DEVELOPMENT AND IMPLEMENTATION

24. There have been varying degrees of progress in the activities of the Decade, depending on the resources available and the capability of IDNDR partners. However, expectations generated by convening of the World Conference have influenced the activities of the Decade to a growing extent. The present report presents an overview of programme developments within the International Framework of Action.

A. Special High Level Council and Scientific and Technical Committee

Special High Level Council

25. The Special High Level Council (SHLC) was established by the Secretary-General in 1991. He convened its first meeting in October of that year in New York. The Council is composed of 10 distinguished members. At its first meeting, in the presence of the Secretary-General, SHLC adopted the New York Declaration.

26. The Secretary-General convened the second session of SHLC in January 1993, in New York, to review the progress of the Decade and to obtain advice on the future direction of Decade activities. At this session, the Government of Japan formally issued its invitation to hold the World Conference on Natural Disaster Reduction in Yokohama, Japan, from 23 to 27 May, 1994. The Council adopted a 12-point Plan of Action leading to the World Conference. The Plan of Action followed consultations with key participants in the activities of the Decade. It emphasized the need to build bridges between governments and international organizations, including financing institutions such as the World Bank and the scientific and technical communities. The Council concluded that there should be a ministerial session at the World Conference, so as to obtain mobilization at the highest political

level for the second part of the Decade. The Council emphasized that reducing vulnerability is a major goal; it also drew the attention to linkages between natural and man-made disasters, as well as mitigation as a prerequisite for sustainable development.

Scientific and Technical Committee

27. The Scientific and Technical Committee was established in 1990, and held its first meeting in Bonn in March, 1991. Twenty-five experts (scientists, journalists, disaster managers etc.) from 25 countries were named to STC. At the Bonn meeting the targets for the Decade were developed along with its programme and framework. A number of steps were adopted to promote the formation and work of national committees and focal points for the Decade. Criteria were adopted for designating international projects to demonstrate the kinds of scientific and technical activities that could be undertaken during the Decade, and a first set of demonstration projects was selected. These included training, research and extension projects proposed by a number of scientific associations and the United Nations system. A public information programme to help promote awareness of the potential of disaster reduction, centred upon the International Day for Natural Disaster Reduction (also known as IDNDR Day) in October of each year, was agreed upon although funding for this programme was, and remains, a problem. STC welcomed the Osservatorio Vesuviano's willingness to sponsor the Decade's newsletter, Stop Disasters. The first issue was published in March 1991.

28. The second STC meeting was held at Guatemala City in September 1991, in conjunction with a Latin American regional IDNDR meeting organized by the Pan-American Health Organization (PAHO). The Committee continued to encourage national efforts, and considered its first report to the General Assembly. In this report, STC reaffirmed the targets and programme of the Decade, particularly the need to strengthen national committees and programmes. The work programme recommended by STC for the Decade secretariat was endorsed by the 10 distinguished members of the Special High Level Council at its first meeting held in New York in October 1991, and adopted by the General Assembly (resolution 46/149) in December 1991.

29. The STC and the Latin American Regional IDNDR meeting drew attention to the need to emphasize the linkages between natural disasters, environmental degradation and sustainable development (Guatemala Declaration), in preparation for the United Nations Conference on Environment and Development (UNCED) at Rio de Janeiro in June 1992. This issue has been repeatedly emphasized by STC in its reports.

30. Members of STC subsequently participated in the meeting of the Organization of African Unity (OAU) at Addis Ababa in April 1992, to promote and coordinate the action of African countries in reducing disasters. They also did so at a comparable PAHO/Organization of American States (OAS) meeting for the Caribbean in Kingston, Jamaica, in May 1992. The pace of national IDNDR meetings was quickening, as were the number of IDNDR co-sponsored scientific and technical meetings worldwide. STC continuously emphasized the fact that such initiatives should lead to practical disaster reduction measures, nationally and regionally.

31. The main objectives of the third session of STC, held at Geneva in March 1992, in addition to continuing efforts to encourage and support national activities, were to develop a plan for a proposed World Conference to be held in 1994, and to provide guidance to the IDNDR secretariat on the development of a programme on the economic benefits of disaster reduction. The latter was of growing importance since it was agreed that clear evidence was needed of the economic benefits of disaster reduction, and that the proof of such benefits was the key to convincing national policy makers and agencies to include disaster reduction in development plans. The World Conference was not to be a purely scientific event, but one where policy makers could interact, with provision for ministerial level involvement.

32. The fourth session of STC was held in New Delhi in February 1993, at the invitation of the Government of India. This gave members of the Committee an opportunity to learn from, and interact with, disaster mitigation specialists from Asian and Pacific countries. At this meeting, the STC Technical Preparatory Group for the World Conference was established.

33. The fifth session of STC was held at Geneva in November 1993. This session was predominantly devoted to giving final shape to the substance of the World Conference's programme, in coordination with the organizations that have assumed major responsibility for organizing technical sessions and regional reports.

B. Inter-Agency coordination

Inter-Agency Working Group

34. The Inter-Agency Working Group (IAWG) of the IDNDR Steering Committee, established by the Secretary-General of the United Nations in 1988, has continued to coordinate the Agencies' action programmes for the Decade Framework. Sixteen meetings of the IAWG have been held since the establishment of the Committee. In 1993 and 1994, the IAWG met four times in preparation for the World Conference on Natural Disaster Reduction. In addition to the traditional participation of the United Nations agencies, a number of non-governmental and scientific organizations such as the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Council of Scientific Unions (ICSU), the World Federation of Engineering Organizations (WFEO), joined the IAWG, and have assumed substantial responsibility in organizing the scientific and technical programme of the World Conference, as mentioned above. All member organizations of the IAWG will be reporting on their IDNDR-related programmes in separate information documents at the World Conference. The IAWG's contribution to the Decade and the Conference is well illustrated in the Conference's programme.

Disaster mitigation

35. The activities of DHA in disaster mitigation and prevention fall into three main categories, namely:

(a) At the global level, strategy development for disaster reduction and mitigation, promotional activities to spread knowledge of the most

effective technical and management methods through case history analyses, manuals, conference presentations, workshops and related promotional and training activities;

(b) At the national and subregional level, to assist authorities in identifying the highest risks, to formulate and implement mitigation programmes, and to set up institutional structures which give permanent attention to such activities;

(c) At the local level, to establish working mechanisms with local authorities to provide guidance on step-by-step disaster mitigation measures for at least one example of each type of high-risk scenario.

36. Current DHA mitigation activities are based on close collaboration and coordination with the United Nations and other organizations and donors. DHA provides technical and professional support for programme development and project implementation. These activities include:

(a) Argentina: Volcanic and technological risks;

(b) Bangladesh: Cyclone mitigation measures;

(c) Botswana: National disaster plan;

(d) Colombia: Integrated, multi-sectoral mitigation programme;

(e) Ecuador: Multi-sectoral programme;

(f) Egypt: Guidance with new national mitigation programme;

(g) Guinea: Strengthening of disaster management capabilities;

(h) Malawi: Mitigation project formulation;

(i) Nepal: Dam break scenario;

(j) Peru: Volcano, earthquake and tsunami risk reduction;

(k) Saudi Arabia: Advice to civil defence;

(l) South Pacific: Disaster preparedness;

(m) Vietnam: Action plan for water disasters;

(n) Mediterranean Region: Cooperative project for seismic risk reduction (SEISMED);

(o) Latin America: Subregional cooperation in disaster mitigation.

C. National committees and regional promotion

National committees

37. By April 1994, 135 countries had declared their formal participation in IDNDR, 83 of which established national committees, and 48 appointed focal points. Four new countries are currently in the process of establishing national committees.

38. In July 1993, the IDNDR secretariat requested the national committees and focal points to evaluate their progress in meeting the Decade's targets, and to indicate their plans in this respect for the second half of the Decade.

39. In particular they were requested to report on:

(a) The composition of national committees, and focal points;

(b) The prevailing hazards, recent natural disasters, and the human and economic losses caused thereby;

(c) Assistance required and available for natural disaster reduction;

(d) Disaster mitigation activities, recently completed or under way;

(e) Steps taken towards achievement of the three main targets of the Decade;

(f) Their national plans and legislation for natural disaster reduction.

40. By April 1994, 92 countries had provided national reports to the IDNDR secretariat. A summary of these reports is available as an addendum to the present report (A/CONF.172/4/Add.1).

41. Although the national reports indicate that progress has been made in the implementation of the International Framework of Action for the IDNDR, it is obvious that the developing, and especially the least developed countries need support to reach the Decade's targets. This is particularly true for training, risk assessment, hazard mapping and warning.

42. As has been emphasized in the national reports, such assistance should be drawn increasingly from bilateral sources, through regional cooperation, and through the exchange of information and know-how among countries prone to the same hazards. Furthermore, the developing countries request international organizations and donor governments to ensure that disaster reduction measures are included in disaster relief and development assistance.

43. The Decade is perceived to be a most valuable instrument to increase political and public awareness of the benefit of natural disaster reduction, and yet it has been remarked that the Decade concentrates perhaps too much on its international and scientific aspects. Thus, many reports emphasize the need for support nationally, and that such support should be increased and focused above all on the general aspects of disaster management and reduction.

Regional promotion

44. A high priority has recently been given to the support of regional IDNDR initiatives. Indeed, a significant increase of political awareness for natural disaster reduction has emerged during regional preparations for the World Conference on Natural Disaster Reduction.

(a) Africa

45. After the disastrous droughts and famines of the 1980s in which hundreds of thousands perished, another drought occurred in southern Africa in 1992/93, but disaster was averted through timely international action. Following a subregional meeting in September 1993, a series of country programmes was installed. The IDNDR secretariat has actively supported the programme through its good offices and promotional work in the African region.

46. Africa has taken note of the General Assembly's recommendations on IDNDR. In February 1994, the Council of Ministers of the Organization of African Unity (OAU) endorsed a proposal for an African Common Position for the World Conference. The Council of Ministers emphasized that disasters have seriously compromised the economic performance of the region, and that they have compounded the cycle of environmental degradation and poverty. It also recognized that existing strategies for disaster relief assistance do not take into account the longer-term issues of disaster reduction, which are tied to development. Therefore, an effective strategy for disaster reduction should be included in medium to long-term development strategies. As a result, a background paper presented to the Economic Commission for Africa's meeting of Ministers of Planning and Economy in April 1994, provided the framework of an African action programme for disaster reduction. A major theme of the African regional programme is that natural disaster reduction forms an integral part of sustainable development.

(b) Asia

47. Disaster preparedness and prevention have a long tradition in many parts of Asia. Programmes in Japan demonstrate that even in the most disaster-prone countries, disaster reduction can achieve positive results. Japan has from the very beginning of the Decade, taken a leading role in promoting and supporting IDNDR's programme. International conferences in Chiba City (1992) and Aichi/Nagoya (1993) further confirmed Japan's role that has led to the World Conference.

48. Many countries in Asia have well-developed national disaster mitigation programmes, and are showing rising interest in international cooperation and in strengthening their institutions for that purpose. The Chinese National IDNDR Committee has developed, among others, an extensive national disaster reduction programme within the framework of the Decade. An international conference on disaster reduction in Beijing on 25 and 26 June 1993, resulted in an important report and recommendations that deserve close international attention.

49. At the request of the IDNDR secretariat, the Asian Disaster Preparedness Centre (ADPC) in Bangkok prepared a background paper reflecting the current

status and future requirements for the implementation of the IDNDR Framework in South and South-East Asia, in cooperation with the Economic and Social Commission for Asia and the Pacific (ESCAP) and the Asian Development Bank (ADB). A working group composed of senior Asian professionals as well as representatives from regional and international organizations, met in February 1994, to review the question.

50. A regional meeting of the SAARC countries was held in March 1994, in New Delhi in order to consider a common SAARC position at the World Conference, as well as a regional programme for disaster reduction.

(c) Caribbean

51. The approach adopted by the Caribbean States has been dictated by the special needs of small island States, where much emphasis is placed on hurricane warning and preparedness. A regional meeting was organized in Port of Spain, Trinidad, by the Seismological Research Unit (SRU) of the University of the West Indies, with the support of the Caribbean Disaster Emergency Response Agency (CDERA), the Caribbean Community (CARICOM), the Pan-American Health Organization (PAHO), and the Organization of American States (OAS). The objectives of this meeting, held on the International Day for Natural Disaster Reduction (October 1993), were to encourage the scientific community of the region to participate in preparations for the World Conference, and to emphasize the need to include earthquake risk reduction more prominently in the agendas of national IDNDR committees. Among the recommendations of the meeting, particularly worth mentioning is the priority given to the vulnerability analysis of critical facilities, such as hospitals and schools. PAHO and OAS undertook to increase their cooperation in their respective areas of competence.

(d) Commonwealth of Independent States

52. Regional interest in the IDNDR has surged in the CIS. A meeting of the CIS countries in Bishkek, Kyrghyzstan, in December 1993, encouraged all the participating countries to join IDNDR and report on their national activities in disaster reduction.

53. National reports reveal that a considerable amount of knowledge and experience on the wide range of natural hazards exists in the CIS, including technological and environmental hazards. The need to include the latter in IDNDR activities in the region has been emphasized. The high frequency and magnitude of natural hazards facing the CIS, as well as its increased vulnerability caused by economic, social and political changes have also been recognized, and underscore the need for effective regional cooperation in training, institution building and in building international links.

54. The meeting in Kyrghyzstan resulted in the establishment of an Interstate Council of the CIS countries hosted by EMERCOM of Russia. An agreement on the establishment of regional cooperation was signed by all the CIS countries. A follow-up meeting held in Almaty, Kazakhstan, in March 1994, finalized the report of the CIS countries to be presented at the World Conference.

(e) Europe

55. Practically all European countries have well-established civil protection organizations and many scientific research institutes specialized in the scientific and technical aspects of disaster reduction, particularly in the earth sciences and engineering. The Council of Europe has established its "Open Partial Agreement" on earthquake risk reduction in Europe and the Mediterranean region. The Nordic countries have traditionally worked closely together in disaster preparedness and management. Many European experts and institutions are active in IDNDR, as are a number of National Committees. Professor M. Lechat of Belgium, one of the Decade's founding fathers, has been the Chairman of the STC Technical Preparatory Group for the World Conference. Germany and Italy have contributed significantly to the Decade by seconding professional staff to the secretariat.

56. A meeting of national IDNDR committees and focal points of the European Union (EU) was held in Brussels in September 1993, with the support of the European Community Humanitarian Office (ECHO), in order to discuss individual and coordinated contributions of the EU countries to the objective and goals of the Decade, and to the World Conference. The meeting noted the very disparate levels of activity among countries of the EU. The meeting also noted that IDNDR's scope was perceived differently from country to country, ranging from concern for natural disaster reduction solely in national terms to exclusive concern for the developing countries.

57. International meetings within the Decade's Framework include two workshops organized by the Royal Society of the United Kingdom in April and October 1993, and meetings in Italy, notably at Perugia. The German Development Foundation, at the request of the IDNDR secretariat, held an international meeting on disasters and development in Berlin in January 1994. The report of the meeting and its recommendations are available at the World Conference.

(f) Latin America

58. In Latin America, strong national and regional disaster reduction programmes have been developed over the years. International organizations, including DHA, support a wide range of disaster mitigation projects. Regional organizations, such as the Pan-American Health Organization (PAHO) and the Organization of American States (OAS) have promoted the organization of national, multidisciplinary workshops to promote the participation of all sectors and institutions in disaster reduction. The IDNDR has a regional activity for Latin America and the Caribbean. In this connection, workshops have taken place in 11 countries. The main output of this activity is an intersectoral statement of priorities.

59. A subregional meeting was organized for the Andean region in Colombia, in August 1993. A Central American workshop was held in El Salvador, in February 1994. Regional preparations in Latin America for the World Conference culminated at an inter-American conference held in Cartagena, Colombia, in March 1994. This event was co-sponsored by IDNDR, PAHO, OAS, the Red Cross, and many scientific and non-governmental organizations.

60. Among the conclusions most frequently reached in these meetings are the need to strengthen the role and leadership of development agencies, rather than continue to rely on specialized mechanisms for disaster relief and response; and the need to obtain the participation of legislatures in this process.

(g) North America

61. The United States of America, together with Japan, has been among the most important initiators and sponsors of the Decade, and its founding General Assembly resolution. The National Academy of Sciences, the National Science Foundation and many Agencies and Departments of the United States Government took part in all the conceptual thinking that went into shaping the Decade. Dr. Frank Press, former President of the United States Academy of Sciences, is one of the founding fathers of the Decade. The United States Geological Survey (USGS) and the Federal Emergency Management Agency (FEMA) have seconded senior staff to the Decade since the establishment of its secretariat. Representatives of the United States Government, of the scientific community, and of the private sector have actively participated in all the principal activities of the Decade. An annual international meeting in Boulder, Colorado, in 1993, devoted a number of sessions to IDNDR and the World Conference. Canada and Mexico have initiated many national IDNDR activities. Canada made an important contribution to the Decade in the person of Mr. J. Bruce, Chairman of STC.

(h) Pacific

62. A regional meeting of national IDNDR committees was held in Vanuatu in August 1993. This meeting was held thanks to the generous support of Australia. It was recognized that some countries of the region lack the infrastructure and disaster management arrangements to be able to sustain active involvement in IDNDR activities. Countries active in implementing the IDNDR Framework should be ready to assist those still not involved. In this regard, the meeting noted the role of the UNDP/DHA South Pacific Disaster Reduction Programme, and observed that it provides a sound vehicle to enhance disaster management capability in the South Pacific.

63. All the participating countries stated their need for focal points for education and awareness-raising. A start could be made through the services of the DHA Pacific Programme Office (SPPO) and of the Australian IDNDR secretariat. The meeting agreed on the establishment of a working group to be coordinated and supported by both these entities. The SPPO has provided assistance in the preparation of national reports and the regional report for the South Pacific region to the World Conference. The regional report is endorsed by the South Pacific Regional Environment Programme (SPREP).

D. Public information; information dissemination, technology and systems

Public information

64. The basis for public information activities of the Decade was laid out in a strategy for public information formulated by the STC in 1991. Public

information activities have concentrated on two major areas: the publication and distribution of the IDNDR newsletter Stop Disasters, and the observance of the International Day for Natural Disaster Reduction.

(a) Stop Disasters

65. The newsletter, Stop Disasters, published at the Osservatorio Vesuviano in Naples, with support from the Italian Government, has become the Decade's main promotional platform. Eighteen issues of Stop Disasters have been issued to date. The press run has gradually increased from 8,000 to 15,600. The newsletter is currently distributed in 192 countries and territories to national IDNDR committees, agencies involved in disaster management, intergovernmental and non-governmental organizations, research and financial institutes. The newsletter, which is produced in four languages, currently serves as an important link between Decade partners. Recently, the United States Federal Emergency Management Agency (FEMA) announced annual support for Stop Disasters. Further contributions have been offered from various sources, including the private sector.

(b) International Day for Natural Disaster Reduction

66. The second Wednesday of October every year is the International Natural Disaster Reduction Day. The IDNDR Day was observed in 1992 and 1993 under the following themes, respectively: natural disaster reduction and sustainable development (1992); focusing on schools and hospitals (1993). On both occasions, observance guidelines and information packages containing publications and other audiovisual materials were compiled and sent to national IDNDR committees, and to regional and international organizations. The varied and innovative observance programmes organized by national IDNDR committees and regional and international organizations indicate a growing interest and involvement in Decade activities.

(c) Public information for the World Conference

67. A World Conference public information programme has been prepared, drawing upon the participation of Decade partners, as follows:

(a) Press kits for the media and other partners in public information;

(b) A general exhibition at Yokohama in which scientific institutes, national IDNDR committees, United Nations agencies and other organizations will take part;

(c) A children's drawing exhibition which has been preceded by national competitions;

(d) A round-table meeting in Yokohama, organized in cooperation with the Annenberg Foundation, to examine the roles of the media, managers and scientists in the dissemination of information on natural disaster reduction.

68. The information campaign beginning in 1994, as recommended by STC, focuses on Decade targets, one by one, worldwide. This enables the identification of priority areas of action, the formulation of common

strategies, and the mobilization of efforts and international participation along a clearly defined path, linking promotion with corresponding actions in the IDNDR programme.

69. In each campaign phase, the scientific community, governments, disaster-prone communities, the media and all other actors in the Decade are asked to contribute their share to the achievement of each target. This can facilitate the mobilization and channelling of support to disaster-prone developing countries, regions or communities seeking assistance.

(d) Decade partners

70. The United Nations Department of Public Information (DPI), which has been assigned a major role in the promotion of the Decade, has produced a video film entitled "Up Against Nature", a brochure on the Decade, and a student leaflet on disasters which has been widely distributed to national IDNDR committees and regional and international organizations. DPI has also cooperated with the secretariat in the organization of press conferences and press releases on a number of Decade-related events.

71. Organizations of the United Nations system, notably WMO, WHO and UNICEF, and other regional and international organizations have produced promotional material on their respective activities related to the Decade. They have also cooperated closely in the compilation of information material for the World Conference media kit.

72. A number of National IDNDR Committees have started their own regular newsletters on the Decade, and have produced special publications and other audiovisual materials on the occasion of the annual International Day for Natural Disaster Reduction. Also at country level, the offices of the Resident Coordinators have given their support to programmes launched as part of the promotion of the World Conference.

73. Although there are some signs of public interest and involvement in Decade activities, a significant amount of work still needs to be undertaken by all Decade partners to further highlight the potential which exists for disaster reduction.

(e) Information dissemination, technology and systems

74. Disaster-related information and communications systems were considered during several IDNDR-sponsored or related meetings. The needs identified and the recommendations made at these meetings were in turn considered by a consultative group of the IDNDR Scientific and Technical Committee in September 1993. This group recognized the importance of disseminating information about the technology of disaster management. It was noted that a number of independent or shared emergency management and response systems exist, based on real-time (or near real-time) communications and computer technologies. These take advantage of terrestrial or space links and are mainly used in disaster relief.

75. The Department of Humanitarian Affairs is planning a new International Emergency Readiness and Response Information System (IERRIS). Its purpose

is to ensure that information of the quality, quantity and timeliness needed is available in the event of international emergencies at multiple decision-making points worldwide. IERRIS is being developed with the support of the Government of the United States. The needs of IDNDR and its partners should be taken into account in the design and implementation of IERRIS. This will permit a maximum of access to the required information for all countries, particularly the developing countries.

76. Information technology is evolving very rapidly. There are many different systems and networks, as well as stand-alone databases which will have to be evaluated. One such system, INTERNET, may become the basis for future disaster information sharing and exchange. It already has in place networks specializing in disaster-related information. Connecting INTERNET to existing and planned (IERRIS) information and communication systems may help accelerate access by disaster managers to the information they need.

77. New forms of networking depart from the traditional centralization of information management functions, placing greater emphasis on information sharing and exchange. Thus, information is being stored in different locations to be assembled through network links. The two principal areas in which information systems development, within the Decade framework, intends to concentrate are:

(a) Defining the information needs of disaster managers at all levels;

(b) Developing communication requirements for the transmission of disaster mitigation data to networks which show promise in connecting all nations, including the developing countries, to the future "information superhighways".

By defining information requirements, a solid disaster prevention and mitigation database can be established. It would cover hazard, vulnerability and risk (expected loss) assessment of selected disaster types, the evaluation of the cost effectiveness of mitigation measures, and the analysis of disaster management systems, including communications capabilities. In order to provide easy access to this information, a standard data format must be established. While it is not suggested that the IDNDR secretariat should collect and centralize the data, it should inform potential users of its availability and means of access. In this way, potential users (national governments, local authorities, investment banks, insurance companies and international, intergovernmental and non-governmental organizations) will be helped in their decision making.

E. Economic aspects of disasters and the private sector

Economic considerations

78. The adverse economic impact of natural disasters has become a major cause of concern. In the developing countries, owing largely to the absence of building and land use controls, both capital losses and loss of life caused by disasters are crippling for the economy and social services. In the industrialized countries, capital losses by far outweigh loss of human lives. Owing to the growing complexity of modern society and its technological

infrastructure, the costs of replacement and repair are likely to become increasingly burdensome. The indirect losses, such as loss of production, are difficult to measure but can be estimated to have equally damaging effects on the economy. The Munich Reinsurance Company has reported that worldwide disaster-incurred losses varied between $41 billion to $60 billion over a three-year period (1991-1993). While such figures are merely estimates, the upward trend is clear.

79. There are growing difficulties in the world of reinsurance where the capability to insure against major natural hazards is shrinking proportionally with the rising financial costs of insured losses. Remedial action is, therefore, urgently required to reduce risk and keep insurance premiums under control through preventive measures. The IDNDR secretariat is stepping up its efforts to involve the business sector in disaster reduction, and to promote collaboration between business and public authorities in applying appropriate technologies to prevention. The programme of the World Conference on Natural Disaster Reduction reflects this will.

80. The importance of introducing mitigation policies and measures into development projects that are exposed to the risk of disaster can only be emphasized and underscored. The costs of mitigation can be measured against the probable loss of lives and property, jobs and services incurred by disaster. A corollary is that disaster prevention must become part of the concept of sustainable development. It is probably the logical route to a satisfactory achievement of IDNDR's objective. Many industrialized countries are now measuring the impact of natural and environmental disasters in GNP terms. This is an encouraging step, as it focuses on both causes and effects of disasters, and not merely on the symptoms, namely emergencies and relief.

Private sector

81. The reinsurance industry is presently seen as an important source of experience and guidance in addressing the issue of economic impact of natural disasters. Several industrial sectors are believed to be a valuable source of information and cooperation for IDNDR. Companies and professional associations operating in telecommunications, remote sensing, chemicals, civil engineering, electronics and satellite technology are well placed to dedicate some of their efforts to the study of disaster warning and reduction. However, more information on the subject is needed by the private sector. To overcome this lack of information, the secretariat is implementing an enlarged information strategy which envisages a more direct approach to private companies.

82. Several private sector workshops on disaster reduction were held in 1992 and 1993 under the auspices of the Office of United States Foreign Disaster Assistance (OFDA). These workshops proved to be an appropriate instrument for establishing useful interaction between the public and private sectors. Furthermore, they demonstrated that disasters are becoming a matter of concern for those who have to bear the costs of disasters out of their own pockets.

83. A tentative framework for cooperation with the private sector has been identified, and the collaboration of the United States Volunteers In Technical Assistance (VITA) has been particularly useful in this regard. VITA has mush

experience with the public-private sector interface on disaster mitigation issues. A meeting organized by the IDNDR secretariat in 1993 noted that disaster information of interest to private companies should be systematically provided. It seems that the private sector is not always aware of the potential of disaster reduction or of the Decade's initiatives in this domain. It was pointed out that the attention of national IDNDR committees should be drawn to this point. The IDNDR newsletter, Stop Disasters, should open up to private contributions. The meeting discussed the possible setting up of a private sector advisory body, which would constitute a new substantive step towards a more effective collaboration between IDNDR and the private sector.

F. International demonstration projects and international and regional projects

84. The Scientific and Technical Committee recommended the establishment and promotion of illustrative projects, known as International demonstration projects. These projects have been selected and are actively monitored by the Decade secretariat. The objective of these illustrative projects is to provide practical examples for disaster reduction managers. A list of demonstration projects is annexed to this report (A/CONF.172/4/Add.3).

85. Because of the increasing number of projects presented for endorsement as demonstration projects, and recognizing the importance of the participation of as many agencies and organizations as possible, STC at its fourth session in 1993 devised three new categories, in addition to the existing demonstration projects:

(a) International and regional IDNDR projects which fall within the framework of the Decade and contribute towards achieving one or more of its targets;

(b) National IDNDR projects which fall within the framework programme of the Decade and contribute towards achieving one or more of the targets, and which have a special value;

(c) National IDNDR demonstration projects which national committees and focal points may wish to designate, and notify the secretariat of.

For ease of reference, these projects are referred to in this report as IDNDR projects.

86. In order to intensify project activities throughout the world and provide guidance to the secretariat and STC on project promotion, STC established a sub-committee comprised of seven members. In July 1993, the STC Sub-Committee initiated a quarterly review of project activities. Four such reviews by the STC Sub-Committee have provided lessons to be learned from the IDNDR projects.

87. Currently, 33 projects (23 demonstration projects and 10 IDNDR projects) are being carried out by seven international scientific and technical organizations, two regional research centres, seven United Nations agencies, three national institutes/universities, and two others. Two demonstration projects by United Nations agencies have been successfully completed.

88. For the period 1990-1994, 25 projects held 71 meetings or workshops which were attended by about 1,000 persons from 154 nations, United Nations agencies and international scientific and technical organizations. Forty-four training courses were attended by more than 1,000 trainees from 100 countries. These meetings and training courses have served not only to disseminate and exchange natural disaster-related knowledge/technology, but also to provide principles and models for natural disaster reduction.

89. Thirty-eight publications, books, proceedings or brochures, and a glossary on natural disasters have resulted from 16 projects. The content of these documents exceeds 4,000 pages. Some of them have been provided free of charge to needy libraries in developing countries. Furthermore, 12 computer software/database systems on natural hazards and engineering have been developed through IDNDR projects.

90. The World Seismic Safety Initiatives project (WSSI), has been devised to increase disaster awareness among policy makers. The Global Seismic Hazard Assessment Programme (GSHAP) is the nucleus of a collaborative effort in the field of earthquake hazard assessment in six regions of the world. The Cyclone Disaster project has developed the use of an unmanned aircraft, the aerosonde, which is used to monitor the atmosphere for cyclone warnings in a safe and cost-effective manner. Three databases on natural disasters have become available to be accessed by people engaged in disaster management. In addition, the UNDP Disaster Management Training Programme (DMTP) has developed a diversity of training materials, mostly in the emergency management field, for UNDP field staff.

III. MID-TERM REVIEW OF THE INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION

91. A mid-term review of the Decade was foreseen when the General Assembly proclaimed the Decade in 1989 (resolution 44/236 of 22 December 1989). A world conference of national IDNDR committees, contributing to the mid-term review, was endorsed by the General Assembly in 1991 (resolution 46/149). In 1992 the STC established the Technical Preparatory Group and began to work on preparations for the World Conference by drafting and adopting the conference's outline programme. During 1993, the Group, in coordination with the IDNDR secretariat and the IAWG, assisted in finalizing the conference programme.

92. In January 1993, the Government of Japan issued an invitation to the Secretary-General to convene the World Conference in May 1994 in Yokohama, Japan. The invitation was accepted, and the preparatory work continued, leading to the adoption by the General Assembly, in December 1993, of resolution 48/188, endorsing the Conference as a United Nations conference, and designated the IDNDR secretariat as the secretariat for the Conference. The Secretary-General has issued invitations to all governments, United Nations and other agencies, and to the private sector, as specified in the resolution.

93. As a consequence of the adoption of resolution 48/188, the preparatory work for the World Conference was re-oriented to ensure the involvement of governments. A series of briefings for the Permanent Missions to the

United Nations Office at Geneva was followed by the meeting of the Preparatory Committee in Geneva in March 1994. The Committee approved the establishment of the Bureau of the Preparatory Committee, composed of six regional representatives, as well as the Conference Programme and Rules and Procedures.

94. In spite of the very short time available to prepare and organize the World Conference following resolution 48/188, the Member States have agreed with the preparatory work so far accomplished, and thus have established a solid basis for the Conference. The preparations for the Conference Programme have been completed in close coordination between the Preparatory Committee, its Bureau, the Agencies and the STC Technical Preparatory Group. The World Conference on Natural Disaster Reduction is expected to be a milestone in policy development and implementation for natural disaster reduction, not only for the second half of the Decade but beyond, into the twenty-first century.

IV. CONCLUSIONS

95. The International Framework of Action for the International Decade for Natural Disaster Reduction which was established by the General Assembly in resolution 44/236, will be reviewed in 1994 by the Economic and Social Council. Set out below are some of the conclusions which have emerged from consultations with a wide range of Decade partners.

A. Objective and goals

96. Thousands continue to die every year, with every event. The developing countries continue to suffer most from natural and other disasters. The cost of relief and reconstruction is a burden to their economies, threatening their sustainable development and is ultimately far greater than the cost of prevention. The first and foremost challenge in the years to come is to bring the developing countries on a par with the others in terms of mitigation and prevention.

97. Progress has been made in reaching the goals of the Decade. Awareness of the benefits of disaster reduction has increased. Exchange of information has improved, particularly in the scientific community, but technology transfer and the practical application of scientific and technical knowledge still needs considerable strengthening. As the goals set in the International Framework of Action for IDNDR are rather broad, the targets set in resolution 46/149 of the General Assembly have helped considerably in focusing attention and effort.

98. A number of projects have been established under the Decade umbrella: a much larger number of disaster reduction projects are being implemented without reference to the Decade. Wider dissemination of information on these projects and their results through the Decade framework would add value to the programme. An international network of institutions could considerably strengthen the exchange of information and knowledge, through research, training and technology transfer. The IDNDR newsletter Stop Disasters could constitute a useful channel in this regard.

99. The Decade's objectives and goals, therefore, have been and remain valid in spite of the many changes that have occurred in the world since the Decade

was created in 1989. It is trusted that the international community shall reaffirm the Decade's action in this respect.

B. Policy measures to be taken at the national level

100. The extent to which disaster reduction has consistently been taken into account in national development programmes is unclear, but recent information indicates a growing tendency to address disaster issues as part of development. Disaster reduction, or prevention, is part of planning rather than emergency management. Nevertheless, the initiative for prevention arises often in the wake of a disaster and therefore, sadly, the emergency phase of a disaster is the most opportune moment to galvanize a country's or community's political will to prevent future destruction and loss of life. To motivate society ahead of disasters is still an uphill struggle. Perhaps the answer to this problem lies in reinforcing the link of disaster reduction with sustainable development, of which it is clearly a part.

101. Of the 135 national IDNDR committees or focal points established so far, some are active, and others have never been heard of since. To be useful and add value to national disaster reduction programmes, national committees should bring together the various sectors in the government, science, media, private sector etc., and play a catalytic role in national programme promotion, formulation and implementation. However, the funding of national committees has been a problem, but is one of the prerequisites for effectiveness.

102. Local level action is the key to success in disaster reduction. Unless individuals, families and communities are motivated and empowered to act, there shall be no success. The role of local non-governmental, "grass-roots" organizations is crucial in supporting such action. The tendency of non-governmental organizations has been to concentrate on relief, but support from national and local authorities could encourage their role in prevention and mitigation.

C. Action taken by the United Nations system

103. The commitment of the United Nations system to implementing the IDNDR's International Framework of Action has varied widely. Some organizations, notably WMO, have adopted the Framework and worked vigorously towards its goals. Many others have not participated actively enough. No additional resources have been made available for the mitigation activities of DHA. The information strategy established and approved for the Decade has not been carried out due to lack of resources. In the field, a limited number of resident coordinators have shown interest and promoted the Decade. As we approach the mid-term review and the World Conference, United Nations system interest is still uneven.

D. Organization of the Decade

104. The organizational arrangements, namely the establishment of SHLC, STC and the secretariat, have been completed. The Council has met twice, adopting two resolutions as general guidance for the Secretary-General. The STC has assumed an important role and been instrumental in shaping the Decade's

programme and technical content. The STC has played a major role in promoting and shaping the World Conference. The secretariat has suffered from frequently changing leadership and from the temporary nature of practically all staff assignments and secondments. Only recently have the integration of the secretariat in DHA and the merger with the Disaster Mitigation Branch started to pull the various strands of disaster reduction together, thus providing support to the Decade's most important goal - supporting programme development for disaster reduction in developing countries.

E. Financial aspects

105. The International Decade for Natural Disaster Reduction has been operated entirely on extra-budgetary support. Financing from a variety of sources during the first half of the Decade kept it afloat, but only just. Contrary to expectations at the beginning, direct financial support for the Decade's programme and projects through the IDNDR Trust Fund has remained scant. Results have come mainly from activities reported by governments, the scientific community, organizations of the United Nations system and others. Yet, the IDNDR Trust Fund is a potentially effective mechanism to assist disaster-prone developing countries in starting up basic disaster reduction programmes. Regular contributions to the fund are needed.

106. The crucial support structure of the Decade, the IDNDR secretariat, has lived on the short-term loan of seconded staff. This has hampered longer-term programme development for the duration of the Decade, let alone beyond. Unless core funding for the Decade can be secured, there is little hope for significant improvement.

107. The difficulty of funding programmes for disaster reduction is a sober reminder of the political priorities: a visible disaster relief action is much more attractive, even if in the long term it achieves very little, compared to a programme or project aiming at strengthening the national capacities to free society from the very need for disaster relief. A fundamental change from relief aid towards the strengthening of national capacities for disaster reduction through sustainable development programmes is required. It appears that until disaster reduction is perceived to be integral to the very notion of sustainable development, the goals and targets of IDNDR, and indeed all disaster mitigation is doomed to chronic shortages of interest, political commitment, and therefore resources.